

Atty. Dkt. No.: EP10007E2
(formerly TSPRI 184.2CON4)

(b) immunoglobulin light chain encoded by said nucleotide sequence wherein said leader sequence is cleaved from said light chain variable region following proteolytic processing, said light chain being capable of assembly in a plant cell with said antigen specific portion of an immunoglobulin heavy chain to form an antigen-specific immunoglobulin, wherein said plant cell does not contain nucleotide sequence encoding said antigen specific portion of an immunoglobulin heavy chain.

78. (New) The plant cell of claim 77 wherein said nucleotide sequence encodes a full-length immunoglobulin light chain.

79. (New) The plant cell of claim 77 wherein said nucleotide sequence encodes a full-length immunoglobulin light chain variable region.

80. (New) The plant cell of claim 77 wherein said nucleotide sequence a variable region and at least a portion of the constant region of an immunoglobulin light chain.

81. (New) The plant cell of claim 77 wherein the plant cell is from a dicotyledonous plant.

82. (New) The plant cell of claim 77 wherein the plant cell is from a monocotyledonous plant.

83. (New) The plant cell of claim 77 wherein the plant cell is from an alga.

84. (New) A plant comprising the plant cell of claim 77.

Please amend claims 53 as shown below. For the examiner's convenience, all prior pending claims are shown below whether or not amended herein. A marked up version of the amended claims is attached under the heading "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

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53. (Amended three times) A plant cell containing:

- (a) - nucleotide sequence encoding an immunoglobulin product comprising at least a portion of the variable region of an immunoglobulin light chain and a leader sequence forming a secretion signal, said light chain derived from an antigen-specific immunoglobulin comprising a heavy and light chain, and;
- (b) immunoglobulin product encoded by said nucleotide sequence wherein said leader sequence is cleaved from said immunoglobulin light chain following proteolytic processing, said light chain being capable of forming an antigen-specific immunoglobulin when co-expressed in a plant cell with said heavy chain from said antigen-specific immunoglobulin wherein said plant cell does not contain nucleotide sequence encoding said immunoglobulin heavy chain.

56. The plant cell of claim 53 wherein the immunoglobulin product comprises a full-length immunoglobulin light chain.

63. The plant cell of claim 53 wherein the plant cell is from a dicotyledonous plant.

64. The plant cell of claim 53 wherein the plant cell is from a monocotyledonous plant.

65. The plant cell of claim 53 wherein the plant cell is from an alga.

67. The plant cell of claim 53 wherein said immunoglobulin light chain variable region is a full length variable region.

68. The plant cell of claim 53 wherein said nucleotide sequence also encodes at least a portion of the constant region of an immunoglobulin light chain.

76. A plant comprising the plant cell of claim 53.

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